ABSTRACT

A fuel cell stack (10) comprises a plurality of stacked unit cells (11). Each unit cell (11) comprises a membrane electrode assembly (1a), and separators (1b, 1c) provided with ribs (5b) which contact the membrane electrode assembly (1a) to realize a current collecting function, and gas passages (4b) formed between the ribs (5b) for supplying a gas to a gas diffusion electrode (1p). The interior of the fuel cell stack (10) comprises a first region and a second region having a lower temperature than the first region. Any one of the gas passages (4b), the ribs (5b), and the gas diffusion electrode (1p) is constituted such that the gas diffusion through the gas diffusion electrode (1p) adjacent to the first region is improved beyond the gas diffusion through the gas diffusion electrode (1p) adjacent to the second region.